

> d his

(FILE 'HOME' ENTERED AT 07:39:55 ON 20 JAN 2004)

FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA'
ENTERED AT

07:40:20 ON 20 JAN 2004

L1 555584 S GLYCOPROTEIN
L2 4677 S ALBUMEN (P) EGG
L3 17366 S WHEY (P) MILK
L4 237 S L1 (P) (L2 OR L3)
L5 98254 S (HELICOBACTER PYLORI) OR (H. PYLORI)
L6 9072 S UREASE (P) L5
L7 1 S L4 (P) L6
L8 3915 S L5 (P) COLONIZATION
L9 597 S L8 (P) INHIBIT?
L10 1 S L4 (P) L9
L11 0 S L10 NOT L7
L12 40948 S GASTROINTESTINAL DISEASE
L13 0 S L12 (P) L4
L14 186 S (HIGH MOLECULAR WEIGHT) (P) WHEY
L15 24 S (HIGH MOLECULAR WEIGHT) (P) ALBUMEN
L16 19 S (L14 OR L15) (P) L1
L17 0 S L16 (P) L6
L18 3393 S KODAMA Y?/AU
L19 4890 S KIMURA N?/AU
L20 1 S (L18 OR L19) AND L4
L21 0 S L20 NOT L10
L22 29 S (L18 OR L19) AND L6
L23 6 S L22 AND L1
L24 2 DUPLICATE REMOVE L23 (4 DUPLICATES REMOVED)
L25 1 S L24 NOT L10

=> log y

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=> file medline caplus biosis embase scisearch agricola
COST IN U.S. DOLLARS                               SINCE FILE          TOTAL
                                                    ENTRY          SESSION
FULL ESTIMATED COST                               0.21          0.21

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FILE 'MEDLINE' ENTERED AT 07:40:20 ON 20 JAN 2004

FILE 'CAPLUS' ENTERED AT 07:40:20 ON 20 JAN 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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FILE 'BIOSIS' ENTERED AT 07:40:20 ON 20 JAN 2004
COPYRIGHT (C) 2004 BIOLOGICAL ABSTRACTS INC.(R)

FILE 'EMBASE' ENTERED AT 07:40:20 ON 20 JAN 2004
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FILE 'SCISEARCH' ENTERED AT 07:40:20 ON 20 JAN 2004
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FILE 'AGRICOLA' ENTERED AT 07:40:20 ON 20 JAN 2004

```
=> s glycoprotein
L1      555584 GLYCOPROTEIN
```

=> s albumen (p) egg
L2 4677 ALBUMEN (P) EGG

```
=> s whey (P) milk
L3      17366 WHEY (P) MILK
```

$$\Rightarrow s_{11}(p) \text{ (12 or 13)}$$

```
=> s (helicobacter pylori) or (H. pylori)
L5      98254 (HELICOBACTER PYLORI) OR (H. PYLORI)
```

=> s urease (p) 15
L6 9072 UREASE (P) L5

$$\Rightarrow s_{14}(p)_{16} = 1_{L4}(p)_{L6}$$

=> d 17 1 ibib abs

L7 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:760034 CAPLUS
DOCUMENT NUMBER: 135:278059
TITLE: Glycoprotein having inhibitory activity against
Helicobacter pylori colonization
INVENTOR(S): Kodama, Yoshikatsu; Kimura, Nobutake
PATENT ASSIGNEE(S): Ghen Corporation, Japan; Nisshin Flour Milling Co.,
Ltd.
SOURCE: Eur. Pat. Appl., 16 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1145644	A2	20011017	EP 2001-400969	20010413
EP 1145644	A3	20020612		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2001294600	A2	20011023	JP 2000-113913	20000414
CA 2344183	AA	20011014	CA 2001-2344183	20010412
US 2001044120	A1	20011122	US 2001-833637	20010413
CN 1331250	A	20020116	CN 2001-123320	20010413
PRIORITY APPLN. INFO.:			JP 2000-113913	A 20000414
AB An inhibitor of *** <i>Helicobacter</i> ***			*** <i>pylori</i> ***	colonization in

which specifically binds to ***H*** . ***pylori*** ***urease***
 . This ***glycoprotein*** is isolated and purified from a
 glycoprotein -contg. substance, esp. that derived from bovine
 milk ***whey*** or ***albumen*** of chicken ***eggs***
 by affinity chromatog. using a column on which ***H*** . ***pylori***
 urease is immobilized. The ***glycoprotein*** is able to
 effectively inhibit ***H*** . ***pylori*** colonization, and thus
 is useful for the prevention or treatment of diseases caused by infection
 of ***H*** . ***pylori*** such as peptic ulcers. A food and
 medicament comprising the inhibitor are also provided.

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```
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L4      237 S L1 (P) (L2 OR L3)
L5      98254 S (HELICOBACTER PYLORI) OR (H. PYLORI)
L6      9072 S UREASE (P) L5
L7      1 S L4 (P) L6
```

=> s 15 (p) colonization

```
L8      3915 L5 (P) COLONIZATION
```

=> s 18 (p) inhibit?

```
L9      597 L8 (P) INHIBIT?
```

=> s 14 (p) 19

```
L10     1 L4 (P) L9
```

=> s 110 not 17

```
L11     0 L10 NOT L7
```

=> s gastrointestinal disease

```
L12     40948 GASTROINTESTINAL DISEASE
```

=> s 112 (p) 14

```
L13     0 L12 (P) L4
```

=> s (high molecular weight) (p) whey

```
L14     186 (HIGH MOLECULAR WEIGHT) (P) WHEY
```

=> s (high molecular weight) (p) albumen

```
L15     24 (HIGH MOLECULAR WEIGHT) (P) ALBUMEN
```

=> s (114 or 115) (p) 11

```
L16     19 (L14 OR L15) (P) L1
```

=> s 116 (p) 16

```
L17     0 L16 (P) L6
```

=> s kodama y?/au

```
L18     3393 KODAMA Y?/AU
```

=> s kimura n?/au

```
L19     4890 KIMURA N?/AU
```

=> s (118 or 119) and 14

```
L20     1 (L18 OR L19) AND L4
```

=> s 120 not 110

```
L21     0 L20 NOT L10
```

=> s (118 or 119) and 16

```
L22     29 (L18 OR L19) AND L6
```

=> s 122 and 11

```
L23     6 L22 AND L1
```

=> duplicate remove 123

DUPLICATE PREFERENCE IS 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH'

PROCESSING COMPLETED FOR L23
L24 2 DUPLICATE REMOVE L23 (4 DUPLICATES REMOVED)

=> s l24 not l10
L25 1 L24 NOT L10

=> d l25 1 ibib abs

L25 ANSWER 1 OF 1 MEDLINE on STN
ACCESSION NUMBER: 2000403971 MEDLINE
DOCUMENT NUMBER: 20389972 PubMed ID: 10930371
TITLE: Acid-dependent adherence of ***Helicobacter***
pylori ***urease*** to diverse polysaccharides.
AUTHOR: Icatlo F C; Goshima H; ***Kimura N*** ; ***Kodama Y***
CORPORATE SOURCE: Immunology Research Institute, Ghen Corp., Sano, Gifu City,
Japan.. irig@ghen.co.jp
SOURCE: GASTROENTEROLOGY, (2000 Aug) 119 (2) 358-67.
Journal code: 0374630. ISSN: 0016-5085.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 200008
ENTRY DATE: Entered STN: 20000901
Last Updated on STN: 20000901
Entered Medline: 20000822

AB BACKGROUND & AIMS: The significance of acid-primed recognition of ligands
by ***Helicobacter*** ***pylori*** ***urease*** is unknown.
This study aimed to further characterize the specificity of ***urease***
adherence in vitro and verify whether specific inhibition will translate
into in vivo suppression of colonization. METHODS: A highly sensitive
competitive enzyme-linked ligand capture assay was used to quantify the
capacity of each test inhibitor to compete with labeled mucin for binding
sites on immobilized native ***urease***. A model polymer that
strongly bound ***urease*** was used in an in vivo trial using
euthymic hairless mice as an infection model. RESULTS: The blockage of
urease-gastric mucin interaction by certain inhibitors revealed an
acid-functional lectin-like activity by ***urease***, specifically
recognizing bacterial lipopolysaccharides and certain species of
polysaccharides, nonbacterial glycolipids, and ***glycoproteins***.
Dextran sulfate significantly (P < 0.01) suppressed colonization of mice
by ***H***. ***pylori*** when given before and/or after challenge.
CONCLUSIONS: The acid-driven high-affinity adherence of ***H***
pylori ***urease*** to mucin and lipopolysaccharides
contributes to gastric mucosal colonization by the bacterium based on in
vivo targeting experiments using specific polysaccharides in a mouse model
with acute infection. Acid-functional ***urease***-homing
polysaccharides that can interfere with ***urease***-mucin or
H. ***pylori*** whole cell-mucin interaction in vitro can
significantly interfere with colonization by the bacterium in vivo.

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=> log y

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	63.42	63.63
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-0.69	-0.69

STN INTERNATIONAL LOGOFF AT 07:51:41 ON 20 JAN 2004